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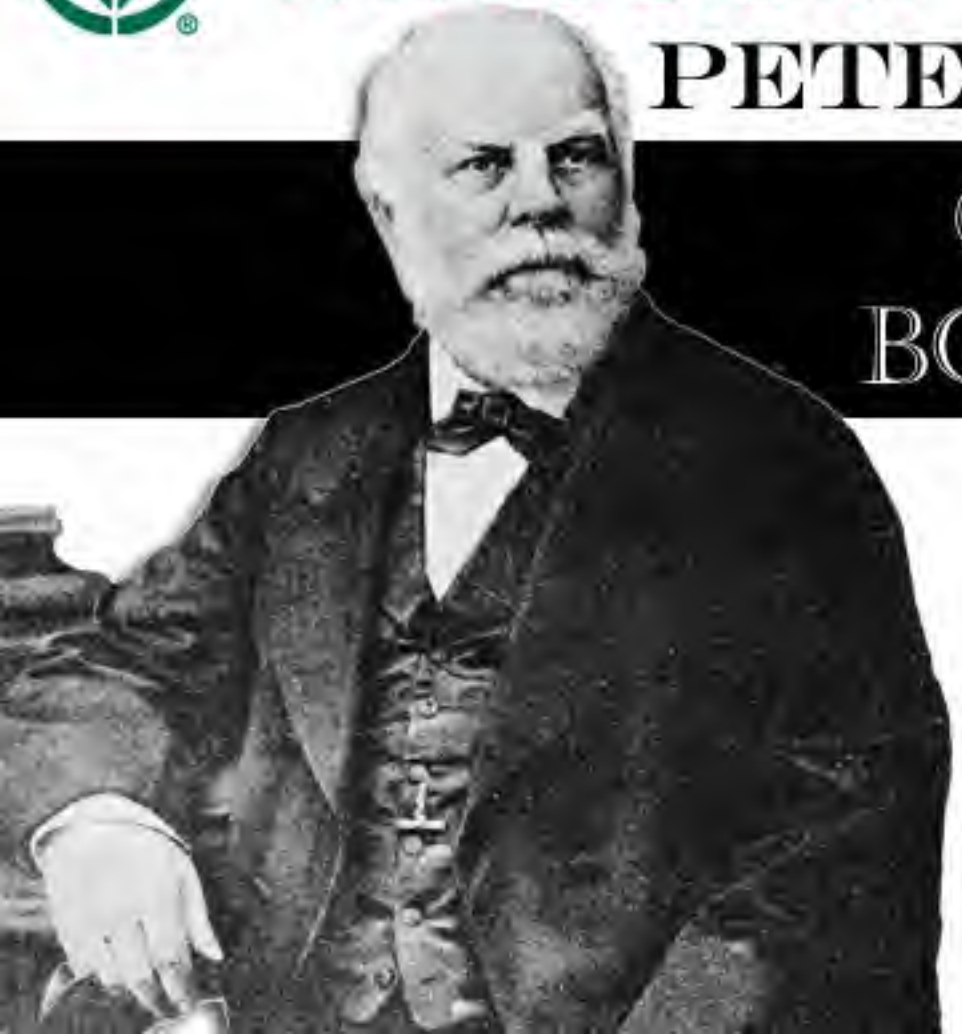

Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

J. Rockliana A. c. Sh. VII. 1858
J. Sylvatica B. multiflora Rochel (Forskanth. III. 328)
J. campestris Bast. 31 T. 1. f. 2
J. melanocephala Gouan Hort. (1826) Fl. Gr. Kit. V. 437 Trinch. Nov. Sp. Gl. II. 308
520.4

interrupted descent and ascent took place from January to December, we find in 1862 some interruptions in the steps of that ladder. The electricity in February, 1862, is about four degrees higher than that of January, April somewhat higher than March, and July is the lowest instead of September in 1861. These trifling irregularities may be accounted for by differences in temperature and relative humidity, and by a greater number of thunderstorms in 1862. January of 1862, for instance, was so unusually rainy, that its relative humidity too was unusually high, diminishing thus electricity. But the general features of distribution of electricity throughout the year are apparent in both years, and we may in that respect divide the twelve months of each year into two or three groups. Computing the months which give the highest electricity and those which give the lowest in each year, we find that in both years the months of January, February, March, April, November and December exhibit the highest, and the months of May, June, July, August, September and October the lowest electricity. The first group gives

The aggregate monthly mean of	71.5	degrees of	electricity	in 1861
and	74.6	"	"	" 1862
While the second group gives	29.0	"	"	" 1861
and	25.7	"	"	" 1862

The second group prevailed therefore in 1861, and the 1st

9515

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VI. The appearance of negative electricity was connected in

1861. No. times.	1862. No. times.	
30	32	with thunderstorms.
23	28	with rains without thunder and lightning.
20	4	with dry storms (without rain and without thunder and lightning).
4	3	with snow.
1	0	with fog.
78	67	

VII. *Relation of Rain and Snow to Electricity.*

Rain without thunderstorm was accompanied

	By Positive Electricity.		By Negative Electricity.		By no Electricity.	
	In 1861.	In 1862.	In 1861.	In 1862.	In 1861.	In 1862.
January.....	7	5	3	2	.....	2 .....
February ...	2	1	4	1	.....	.....

cm 0 1 2 3 4 5 6 7 8 9 10
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T. Rochelianus Rchb. f. Ol. 13 1865

T. sylvaticus β. multiflorus Rochl

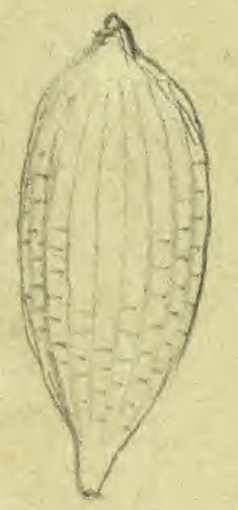
Banates 1865

= H.B. [illegible] Mus

head brown, 8–12 flowered,

Grandes

x6



sepala exteriora oblongo-

ovata subobtusa dorso

seed strongly

reticulate

interiora lanceolata acuta

subaequalia sepalo

0 1 2 3 4 5 6 7 8 9 10
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Meyer in Ledeb. Fl. Ross. IV. 226 (1853)

Sarmat. asiat. Krok. Iter. I. sylvaticus Reich.

---

antheta erecta
sepalis acuminatis aristatis
internodiis longioribus apice subracemosis
capsulam trigonovatam
longe cuspidatam non
aequantibus
foliis delicate - aequaliter

---

erecta
acuminatis aristatis
subbrevioribus apice
racemosis
triquetram pyramidato -
acuminatam non
aequantibus
tenuiter compressis

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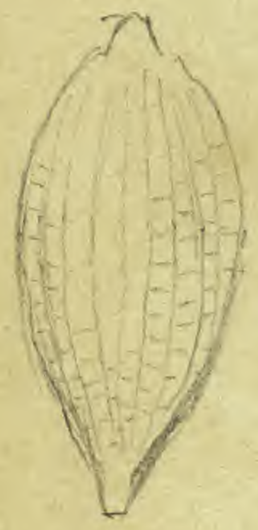
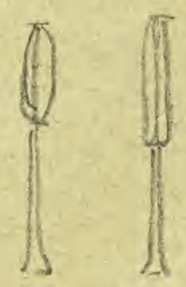
Dasyurus melanocephalus Fries DK. ok 13.65

Flora 1836 p. 437
Stud. glum. 2. 308

Stud. glum. 2. 308
Manndrus Fries. HB Mss

capitula densa
congesta





squala omni-
corticata arcuata
extus in subulam longam
nigrosetis, intus ima apice
albido marginata

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coarse rugæ or pittings, which, however, may be due to weathering.

Dimensions.—Length, 0.20 of an inch; width, 0.18.

The *Elœacrinus Kirkwoodensis* is nearly allied to *E.* (*Pentremites*) *melo*, from which it is distinguished by its much smaller size and less deeply excavated base. It also occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the Pacific railroad near Kirkwood, St. Louis county, Missouri.

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30′ west of Greenwich, west of south of Salt Lake, in Thomas' range of mountains, on Capt. Simpson's return trail. Circumstances prevented me from obtaining more than a few crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

The mountains of the former Territory of Utah promise a rich yield to the mineralogist. We know already of gold and silver ores in the east, west and south part of that district; of copper and lead ores in the south, and I have discovered the latter also in the centre of it; of specular iron ores and native sulphur in the Rocky Mountains and near Little Salt Lake; of rock salt in the mountains south-east of Utah Lake; of native alum near Salt Lake; of various other salts in the deserts; and of silicates, composing the granites, porphyries, diorites, trachytes, and lavas, nearly over the whole area.

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6156

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0 1 2 3 4 5 6 7 8 9 10 cm

Senecio Schiedeanus Hook.t. Sept 26 1865

Adda, S. Lingua
Jan. 1837

×66

×10

nodosi Lexandri

0 1 2 3 4 5 6 7 8 9 10
cm
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cm 0 1 2 3 4 5 6 7 8 9 10
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July	2	4				3
August	3		1		1	2
September	4			1	4	8
October	3	1	1	1	7	1
November	2	3		7		7
December	2	3				6
	50 + el.	36 + el.	23 — el.	28 — el.	15 no el.	34 no el.

Snowing was accompanied

	By Positive Electricity.		By Negative Electricity.		By no Electricity.	
	In 1861.	In 1862.	In 1861.	In 1862.	In 1861.	In 1862.
January	3	9		2		
February	12	8		1		
March	3	12				
October		1				
November		4				
December	5	2	2			1
	23 + el.	36 + el.	2 — el.	3 — el.		1 no el.

REMARKS.

The monthly mean of atmospheric electricity in 1862 was not quite so regular as that in 1861. While in 1861 an un-

5.2.2

formed by the months of January, February, [illegible] and December; the second with a mean electricity by the months of March, April, May and October; and the third with the lowest electricity by the months of June, July, August and September.

The aggregate monthly mean of

The first group in 1861 is	52.9	—in 1862,	54.6
The second	"	"	33.5	"	35.2
The third	"	"	14.1	"	10.5

Thus in 1861 the third group prevailed, and in 1862 the first and second. But these differences are so well balanced throughout the year, that the mean of the whole year in 1861 and in 1862 is exactly the same, namely, 8.4. Such an identity in the yearly result, even to decimals, is of course not to be expected every year; but it seems to prove, at least, that the yearly mean of electricity is as constant as that of temperature, of relative humidity, and of atmospheric pressure.

The third table, showing the daily periodicity of atmospheric electricity, confirms the daily two maxima and two minima of electricity as an undeniable fact.

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0 1 2 3 4 5 6 7 8 9 10 cm

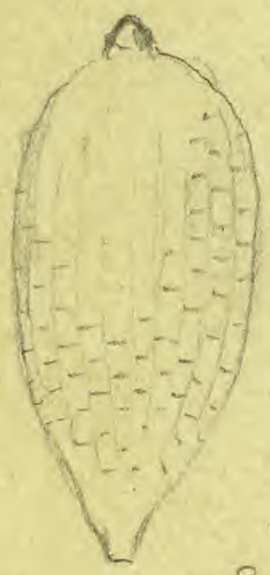
Juncus Lagunarius Jay April 1st 1866

Toulouse Jay mss. = Herb. Pickard

too near J. acutiflorus ?

spec. 6 inches high

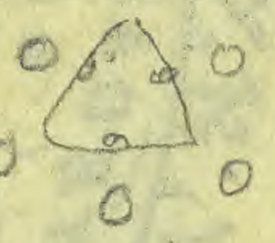
not quite ripe



8-9 nb.

reticulate &
cross linéolate

sepals abruptly acuminate
exterior parts brown
S. Vix



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cm
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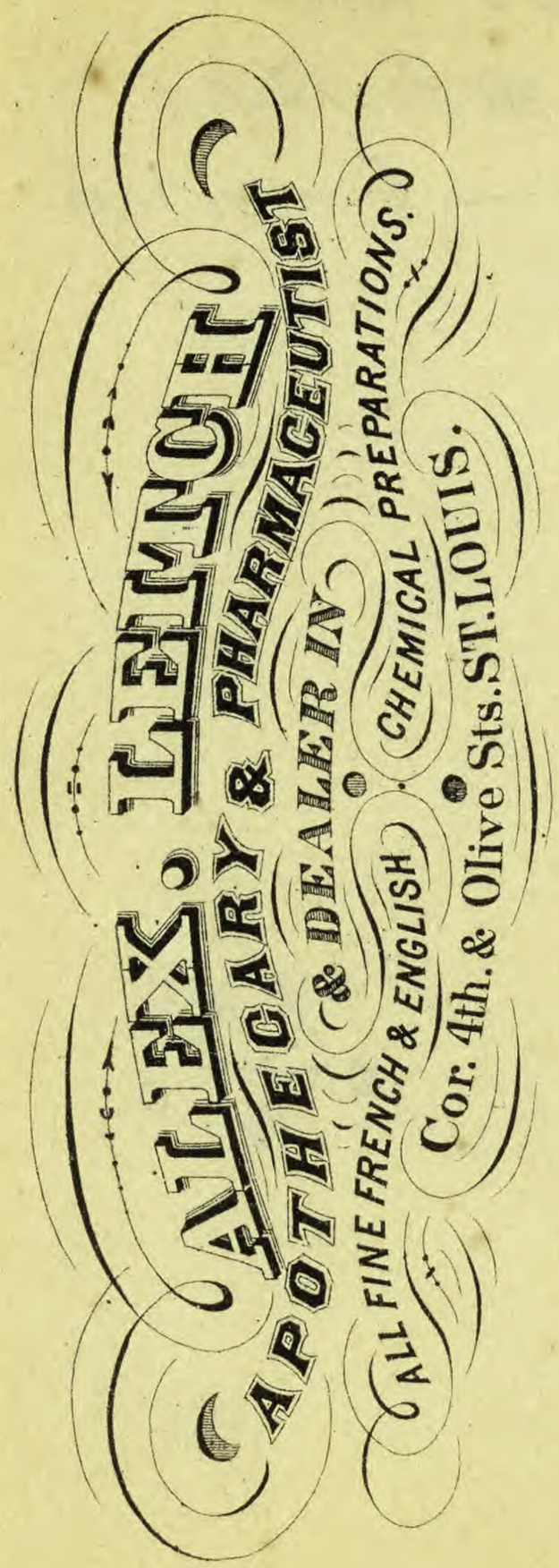

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2256

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ering.

Dimensions.—Length, 0.20 of an inch; width, 0.18.

The *Elæacrinus Kirkwoodensis* is nearly allied to *E.* (*Pentremites*) *melo*, from which it is distinguished by its much smaller size and less deeply excavated base. It also occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the Pacific railroad near Kirkwood, St. Louis county, Missouri.

S-27

cm 0 1 2 3 4 5 6 7 8 9 10
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as' range of mountains,
cumstances prevented me from obtaining more than [illegible]
crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

The mountains of the former Territory of Utah promise a rich yield to the mineralogist. We know already of gold and silver ores in the east, west and south part of that district; of copper and lead ores in the south, and I have discovered the latter also in the centre of it; of specular iron ores and native sulphur in the Rocky Mountains and near Little Salt Lake; of rock salt in the mountains south-east of Utah Lake; of native alum near Salt Lake; of various other salts in the deserts; and of silicates, composing the granites, porphyries, diorites, trachytes, and lavas, nearly over the whole area.

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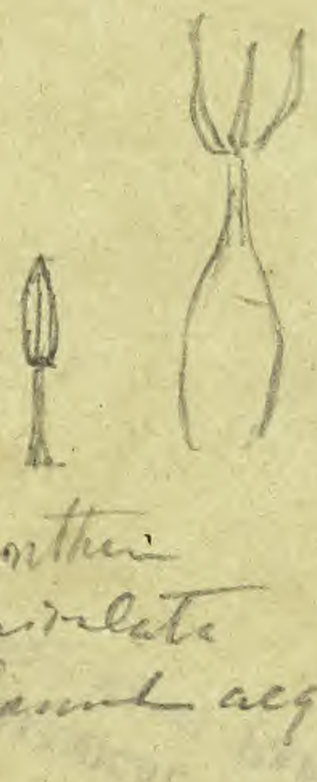
0 1 2 3 4 5 6 7 8 9 10 cm

Juncus exsertus / J. capensis Sept 29 1865

Kunth Enum 3, 329

J. oxycarpus var E. Mey.

Capsule 8–10 flow



Unripe

Sepals acuti
interiora
obtusiuscula

anthers
apiculate
filament acq

Nodes: 6 anch

0 1 2 3 4 5 6 7 8 9 10
cm
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	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	32.2	40.4	44.8	58.1	64.1	76.9	77.5	78.6	69.1	57.9	46.0	39.7	57.1°F.
1862...	28.9	30.2	43.2	55.0	69.7	75.1	81.2	80.7	72.1	57.3	42.6	41.3	56.4°F.

RELATIVE HUMIDITY.

	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	72.2	63.3	64.5	61.5	66.3	70.8	66.3	69.6	77.3	76.6	69.0	74.3	69.5
1862...	85.3	73.9	70.8	67.0	57.3	67.0	66.8	64.3	74.2	67.2	69.5	74.6	69.8

III. *Yearly mean of Positive Electricity of Temperature, and of Relative Humidity of the Atmosphere, at the hours of* 6, 9, 12, 3, 6 *and* 9, *from morning till night, based upon daily observations at these hours through the years* 1861 *and* 1862, *at St. Louis, Mo.*

ELECTRICITY.

	At 6 A.M.	At 9 A.M.	At 12 M.	At 3 P.M.	At 6 P.M.	At 9 P.M.
1861	8.6	10.0	9.2	7.9	8.7	6.9
1862	8.9	10.0	9.1	7.3	8.1	6.8

TEMPERATURE.

1861	48.9° F...	54.9	61.6	63.6	59.3	54.3
1862	48.9	55.0	60.9	62.3	58.0	53.6

RELATIVE HUMIDITY.

1861	86.4	71.3	60.3	57.2	65.1	77.3
1862	85.3	70.6	60.0	57.5	67.6	78.0

0 cm 1 2 3 4 5 6 7 8 9 10
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G'23-1

	112	191	211	230	259	265	351	550	S.E.	90

V. *Positive or Negative Electricity in the Observations of* '61 & '62.

	Positive Electricity.		Negative Electricity.		No Electricity, or 0.		Highest Positive Electricity.	
	1861.	1862.	1861.	1862.	1861.	1862.	1861.	1862.
Jan.....	179	179	3	5		2	40°	40°
Feb.....	162	166	6	2			34	33
March...	168	179	15	8			30	48
April	157	157	12	22	1	1	33	52
May.....	171	180	17	5	1	3	25	32
June	162	143	5	2	8	20	16	21
July.....	183	153	3	8	1	24	14	11
August..	176	143	5	4	6	40	15	19
Sept.....	169	117	1	1	10	61	18	23
Oct.....	162	143	4	3	20	41	33	35
Nov.....	172	157	2	7	6	16	42	42
Dec.....	175	166	5	0	6	17	37	35
	2046	1883	78	67	59	225	42°	52°

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Senecio obtusifolius Ehrh. Aug 18 1865

Germany 1827

Capitula 6-10-flo

x60

x10

0 1 2 3 4 5 6 7 8 9 10
cm
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	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	32.2	40.4	44.8	58.1	64.1	76.9	77.5	78.6	69.1	57.9	46.0	39.7	57.1°F.
1862...	28.9	30.2	43.2	55.0	69.7	75.1	81.2	80.7	72.1	57.3	42.6	41.3	56.4°F.

RELATIVE HUMIDITY.

	Jan.	Feb.	Mar.	Ap'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	72.2	63.3	64.5	61.5	66.3	70.8	66.3	69.6	77.3	76.6	69.0	74.3	69.5
1862...	85.3	73.9	70.8	67.0	57.3	67.0	66.8	64.3	74.2	67.2	69.5	74.6	69.8

III. *Yearly mean of Positive Electricity of Temperature, and of Relative Humidity of the Atmosphere, at the hours of* 6, 9, 12, 3, 6 *and* 9, *from morning till night, based upon daily observations at these hours through the years* 1861 *and* 1862, *at St. Louis, Mo.*

ELECTRICITY.

	At 6 A.M.	At 9 A.M.	At 12 M.	At 3 P.M.	At 6 P.M.	At 9 P.M.
1861	8.6	10.0	9.2	7.9	8.7	6.9
1862	8.9	10.0	9.1	7.3	8.1	6.8

TEMPERATURE.

1861	48.9° F...	54.9	61.6	63.6	59.3	54.3
1862	48.9	55.0	60.9	62.3	58.0	53.6

RELATIVE HUMIDITY.

1861	86.4	71.3	60.3	57.2	65.1	77.3
1862	85.3	70.6	60.0	57.5	67.6	78.0

5.26

0 cm 1 2 3 4 5 6 7 8 9 10
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V. *Positive or Negative Electricity in the Observations of* '61 & '62.

	Positive Electricity.		Negative Electricity.		No Electricity, or 0.		Highest Positive Electricity.	
	1861.	1862.	1861.	1862.	1861.	1862.	1861.	1862.
Jan.....	179	179	3	5		2	40°	40°
Feb.....	162	166	6	2			34	33
March...	168	179	15	8			30	48
April	157	157	12	22	1	1	33	52
May.....	171	180	17	5	1	3	25	32
June	162	143	5	2	8	20	16	21
July.....	183	153	3	8	1	24	14	11
August..	176	143	5	4	6	40	15	19
Sept.....	169	117	1	1	10	61	18	23
Oct.....	162	143	4	3	20	41	33	35
Nov.....	172	157	2	7	6	16	42	42
Dec.....	175	166	5	0	6	17	37	35
	2046	1883	78	67	59	225	42°	52°

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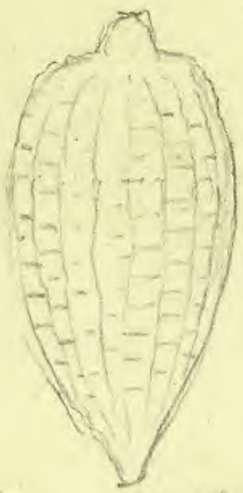
cm 0 1 2 3 4 5 6 7 8 9 10

Iuncus Forskaolii Jacq ? Oct 10 1867

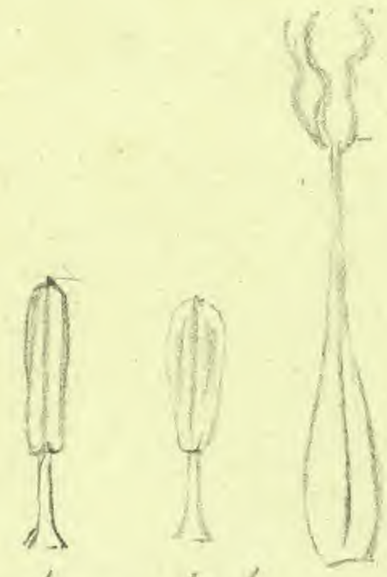
Syria, J W Clinton d.d

flores pedicellati
5–12 ∴ capitulo

×60



seed not fully ripe



effete fresh

×150

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